

COMMONWEALTH OF VIRGINIA  
STATE AIR POLLUTION CONTROL BOARD  
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9 VAC 5 CHAPTER 60.  
HAZARDOUS AIR POLLUTANT SOURCES.

PART II.  
Emission Standards.

ARTICLE 5.  
Emission Standards for Toxic Pollutants from New and Modified Sources  
(Rule 6-5).

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9 VAC 5-60-300. Applicability and designation of affected facility.

A. Except as provided in subsections C, D, and E of this section, the affected facility to which the provisions of this article apply is each stationary source that emits or may emit any toxic pollutant and that either (i) is subject to the new source review program, or (ii) has a permit containing emission limits and other requirements pursuant to this article.

B. The provisions of this article apply throughout the Commonwealth of Virginia.

C. This article shall not apply to the following:

1. A stationary source that has a potential to emit a toxic pollutant with a TLV® at a level equal to or less than the exemption emission rate calculated using the exemption formulas set forth below for the applicable TLV®. If more than one exemption formula applies to a toxic pollutant emitted by a source, the potential to emit for that pollutant shall be equal to or less than both applicable exemption formulas in order for the source to be exempted for that pollutant. The exemption formulas apply on an individual basis to each toxic pollutant for which a TLV® has been established.

a. For toxic pollutants with a TLV-C®, the following exemption formula applies, provided the potential to emit does not exceed 22.8 pounds per hour:

Exempt Emission Rate(pounds per hour) =

$$\text{TLV-C}^{\text{®}}(\text{mg/m}^3) \times 0.033$$

b. For toxic pollutants with both a TLV-STEL<sup>®</sup> and a TLV-TWA<sup>®</sup>, the following exemption formulas apply, provided the potential to emit does not exceed 22.8 pounds per hour or 100 tons per year:

Exempt Emission Rate (pounds per hour) =

$$\text{TLV-STEL}^{\text{®}}(\text{mg/m}^3) \times 0.033$$

Exempt Emission Rate (tons per year) =

$$\text{TLV-TWA}^{\text{®}}(\text{mg/m}^3) \times 0.145$$

c. For toxic pollutants with only a TLV-TWA<sup>®</sup>, the following exemption formulas apply, provided the potential to emit does not exceed 22.8 pounds per hour or 100 tons per year:

Exempt Emission Rate (pounds per hour) =

$$\text{TLV-TWA}^{\text{®}}(\text{mg/m}^3) \times 0.066$$

Exempt Emission Rate (tons per year) =

$$\text{TLV-TWA}^{\text{®}}(\text{mg/m}^3) \times 0.145$$

2. A stationary source that has a potential to emit any toxic pollutant without a TLV<sup>®</sup> if, upon the owner's request, the board determines to exempt that toxic pollutant from the provisions of this article using available health effects information. The exemption determination shall be made by the board using information submitted by the owner at the request of the board as set out in 9 VAC 5-60-340.

3. A stationary source subject to an emission standard or other requirement set forth in Article 2 (9 VAC 5-60-10 et seq.) of this part. If less than all of the stationary source is regulated by such an emission standard or other requirement, then only that part of the stationary source regulated by the emission standard or other requirement is exempted.

4. A stationary source in a source category that is regulated by an emission standard or other requirement established pursuant to § 112 of the federal Clean Air Act and subject to the source category schedule for standards. If less than all of the stationary source is in a source category that is regulated by such an emission standard or other requirement, then only that part of the stationary source in the source

category regulated by the emission standard or other requirement is exempted.

5. A stationary source in a source category for which the U.S. Environmental Protection Agency has made a formal determination that no regulations or other requirements need to be established pursuant to § 112 of the federal Clean Air Act and has published the determination in the source category schedule for standards.

6. A boiler, incinerator, or industrial furnace as defined in 40 CFR 260.10 and subject to 9 VAC 20 Chapter 60 (9 VAC 20-60-12 et seq.), provided it (i) meets the 99.99% destruction and removal efficiency standard required by 9 VAC 20 Chapter 60 (9 VAC 20-60-12 et seq.), and (ii) has received a permit or has qualified for interim status in accordance with 9 VAC 20 Chapter 60 (9 VAC 20-60-12 et seq.). The board shall be furnished with an acceptable certification that such boiler, incinerator, or industrial furnace is in compliance with the standards of its permit or interim status and applicable provisions of 9 VAC 20 Chapter 60 (9 VAC 20-60-12 et seq.). Unless exempted under 9 VAC 5-60-300 C 4, facilities that burn hazardous waste for energy recovery are subject to this article.

7. A generator or boiler that burns only natural gas, #2 fuel oil, #4 fuel oil, #6 fuel oil, propane, or kerosene.

D. Provisions of this article do not apply to any consumer product used in the same manner as normal consumer use, provided the use results in a duration and frequency of exposure which is not greater than exposures experienced by consumers. This may include, but not be limited to, personal use items, janitorial cleaning supplies, and facility grounds maintenance products, such as fertilizers, pesticides, and paints for structural components.

E. With regard to the application of pesticides, the provisions of this article shall apply only to the air quality impact from emissions from application inside the premises of the following affected facilities:

1. Industrial and manufacturing operations, including warehouse and storage operations related to the operation of these facilities.

2. Warehouse and storage operations at transportation terminals.

The provisions of this article shall not apply to the air quality impact from emissions from the application of any pesticide outside.

F. No provision of this article shall limit the power of the board to apply the provisions of this article to any affected facility in order to prevent or remedy a condition that may cause or contribute to the endangerment of human health.

9 VAC 5- 60-310. Definitions.

A. For the purpose of the Regulations for the Control and Abatement of Air Pollution and subsequent amendments or any orders issued by the board, the words or terms shall have the meaning given them in subsection C of this section.

B. As used in this article, all terms not defined here shall have the meanings given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.

C. Terms defined.

"Best available control technology" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each toxic pollutant which the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination of them, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

"Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Pesticide" means the same as the definition given in § 3.1-249.27 of the Virginia Pesticide Control Act.

"Potential to emit" means an emission rate based on the maximum capacity of a stationary source to emit a toxic pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a toxic pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or its effect on emissions is state or federally enforceable. Fugitive emissions shall be included in determining a stationary source's potential to emit.

"Significant ambient air concentration" means the concentration of a toxic pollutant in the ambient air that if exceeded may have the potential to injure human health.

"Source category schedule for standards" means the schedule issued

pursuant to § 112(e) of the federal Clean Air Act for promulgating MACT standards issued pursuant to § 112(d) of the federal Clean Air Act and published in the Federal Register at 67 FR 6521, February 12, 2002.

"Threshold limit value (TLV®)" means the maximum airborne concentration of a substance to which the American Conference of Governmental Industrial Hygienists (ACGIH) believes that nearly all workers may be repeatedly exposed day after day without adverse effects and which is published in the ACGIH Handbook (see 9 VAC 5-20-21). The TLV® is divided into three categories: TLV-Time-Weighted Average® (TLV-TWA®), TLV-Short-Term Exposure Limit® (TLV-STEL®), and TLV-Ceiling® (TLV-C®).

"TLV-TWA®" means the time-weighted average concentration for a normal eight-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (as defined in the ACGIH Handbook).

"TLV-STEL®" means the concentration to which workers may be exposed continuously for a short period of time without suffering from irritation, chronic or irreversible tissue damage, or narcosis of sufficient degree to increase the likelihood of accidental injury, impair self-rescue or materially reduce work efficiency. The TLV-STEL® supplements the TLV-TWA® where there are recognized acute effects from a substance whose toxic effects are primarily of a chronic nature.

"TLV-C®" means the concentration that should not be exceeded during any part of the working exposure.

"Toxic pollutant" means any air pollutant listed in § 112(b) of the federal Clean Air Act, as revised by 40 CFR 63.60, or any other air pollutant that the board determines, through adoption of regulation, to present a significant risk to public health. This term excludes asbestos, fine mineral fibers, radionuclides, and any glycol ether that does not have a TLV®.

9 VAC 5-60-320. Standard for toxic pollutants.

If a stationary source is not exempt under 9 VAC 5-60-300 C, D, or E, then the following standards shall be met:

1. Regardless of any provision of any other regulation of the board, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any emissions of toxic pollutants in such quantities as to cause, or contribute to, any significant ambient air concentration that may cause, or contribute to, the endangerment of human health.
2. The owner of new or modified sources shall employ best available control technology as may be approved by the board for the control of toxic pollutants.

9 VAC 5-60-330. Significant ambient air concentration guidelines.

For the purpose of case-by-case consideration between the board and the owner, significant ambient air concentrations are any of the following:

1. For pollutants with a TLV-C®, any one-hour concentration of a toxic pollutant in excess of 1/40 of the TLV-C®.
2. For pollutants with both a TLV-STEL® and a TLV-TWA®, any one-hour concentration of a toxic pollutant in excess of 1/40 of the TLV-STEL® and any annual concentration of a toxic pollutant in excess of 1/500 of the TLV-TWA®.
3. For pollutants with only a TLV-TWA®, any annual concentration of a toxic pollutant in excess of 1/500 of the TLV-TWA® and any one-hour concentration of a toxic pollutant in excess of 1/20 of the TLV-TWA®.
4. Any concentration resulting from the emissions of a toxic pollutant from an affected facility which the owner knows, or reasonably should be expected to know, may cause, or contribute to, the endangerment of human health.
5. Any concentration, other than those specified in subdivision 1, 2, 3, or 4 of this section, including those resulting from toxic pollutants not having a TLV®, which the board determines to cause, to have the potential to cause, or to contribute to, the endangerment of human health. This determination will be made by considering information by recognized authorities on the specific health effects of such toxic pollutants.

9 VAC 5-60-340. Submittal of information.

The owner of an affected facility shall upon the request of the board submit such information as may be needed to determine the applicability of, or compliance with, this article. The board may determine the schedule, manner and form for the submittal of the information.

9 VAC 5-60-350. Determination of ambient air concentrations.

A. The owner shall, upon the request of the board, provide an assessment as to whether his facility emits, or may emit, any toxic pollutant in such quantities as to cause, or contribute to, any concentration exceeding, or which may exceed, any significant ambient air concentration.

B. Ambient air concentrations shall be determined using air quality analysis techniques (modeling) based on emission rates equal to the facility's potential to emit for the applicable averaging time or any other method acceptable to the board.

C. Ambient air concentrations shall include all emissions from the stationary

source, including those from sources exempted under 9 VAC 5-60-300 C.

9 VAC 5-60-360. Compliance.

If the board has reason to believe that the emissions from an affected facility are, or may be, discharged in such quantities so as to cause, or contribute to, any ambient air concentration that is (i) in excess of any significant ambient air concentration specified in 9 VAC 5-60-330, or (ii) has the potential to cause or contribute to substantial and imminent endangerment of human health, a permit shall not be issued until the owner complies with one or more of the following:

1. Demonstrate that the emissions from the facility do not, and will not, cause, or contribute to, any of the significant ambient air concentrations in 9 VAC 5-60-330 being exceeded.
2. Demonstrate that the applicable significant ambient air concentration in 9 VAC 5-60-330 is inappropriate for the toxic pollutant in question by showing that the emissions from the affected facility produce no endangerment of human health.
3. Control the emissions from the affected facility to a level resulting in ambient air concentrations that are below the significant ambient air concentrations or resulting in such other ambient air concentrations acceptable to the board.

9 VAC 5-60-370. Public participation.

If the owner of an affected facility chooses the demonstration under subdivision 2 of 9 VAC 5-60-360, the provisions of this section shall apply.

1. Prior to the decision of the board on the acceptability of the demonstration, the demonstration shall be subject to a public comment period of at least 30 days.
2. The board shall notify the public of the opportunity for public comment on the information available for public inspection under the provisions of subdivision 3 of this section. The notification shall be made by advertisement in one newspaper of general circulation in the affected air quality control region and, if available, one newspaper that circulates in the area where the affected facility is located. A copy of the notice shall be sent to the governing body of the locality where the affected facility is located and to the governing bodies of the localities where ambient air quality impacts from the affected facility exceed the significant ambient air concentration guidelines in 9 VAC 5-60-330. The notice shall include a brief description of the pollutants of concern and their possible health impacts, the demonstration, a statement listing the requirements in subdivisions 4 and 5 of this section, and the name and telephone number of a department staff person from whom detailed information on the demonstration and the pollutants may be obtained.

3. Information relevant to the demonstration, including (i) information produced by the owner showing that the emissions from the affected facility do not endanger human health and (ii) the preliminary review, analysis and tentative determination of the board, shall be available for public inspection during the entire comment period in at least one location in the affected air quality control region.

4. Following the initial publication of notice of a public comment period, the board will receive written requests for a public hearing to consider the source's demonstration under subdivision 2 of 9 VAC 5-60-360. The request shall be submitted within 30 days of the appearance of the notice in the newspaper. Request for a public hearing shall contain the following information:

a. The name, mailing address and telephone number of the requester;

b. The names and addresses of all persons for whom the requester is acting as a representative;

c. The reason why a hearing is requested; and

d. A brief, informal statement setting forth the factual nature and the extent of the interest of the requester or of the persons for whom the requester is acting as representative, including an explanation of how and to what extent such interest would be directly and adversely affected by the demonstration in question.

5. The board shall review all timely requests for public hearing filed during the 30 days following the appearance of the public comment notice in the newspaper. Within 30 calendar days following the expiration of the public comment period the board shall grant a public hearing if it finds that one or both of the following apply:

a. There is significant public interest in the demonstration in question.

b. There are substantial, disputed issues relevant to the demonstration in question.

6. The board shall notify by mail the owner making the demonstration and each requester, at his last known address, of the decision to convene or deny a public hearing. The notice shall contain a description of the procedures for the public hearing and for the final determination under this section.

7. If the board determines to hold a public hearing, the hearing shall be scheduled at a time between 30 and 60 days after mailing the notification required by subdivision 6 of this section. The public hearing shall be held in the affected air quality control region.



8. The procedures for notification to the public and availability of information used for the public comment period and provided in subdivisions 2 and 3 of this section shall also be followed for the public hearing.

NOTE: In adopting amendments to this article to be effective May 1, 2002, the board renumbered the sections. In the interest of economy and efficiency, the board did not make the corresponding change at each place the old section numbers occur throughout the Regulations for the Control and Abatement of Air Pollution. However, it is the intent of the board to make that change in other parts of the regulations as the opportunity presents itself. Until such changes are made, the old section numbers (9 VAC 5-50-160 through -230) shall be construed to mean the new section numbers (9 VAC 5-60-300 through -370) throughout the regulations of the board.

#### HISTORICAL NOTES:

Derived from: Rule 5-3 of Part V of VR 120-01 (§ 120-05-0301 through § 120-05-0308)

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